



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|                            |   |                                 |
|----------------------------|---|---------------------------------|
| Applicant: Freeman et al.  | ) | Group Art Unit:                 |
|                            | ) |                                 |
| Serial No: 10/649,209      | ) | Examiner:                       |
|                            | ) |                                 |
| Filed: 08/27/2003          | ) | Attorney Docket No.: 1693-90485 |
|                            | ) |                                 |
| For: BEAMFORMED ULTRASONIC | ) |                                 |
| IMAGER WITH DELTA-SIGMA    | ) |                                 |
| FEEDBACK CONTROL           | ) |                                 |

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In accordance with 37 C.F.R. §§ 1.51, 1.56, 1.97 and 1.98 applicant submits herewith the attached form PTO 1449 for consideration by the Examiner in connection with the examination of the present application. Under 37 C.F.R. §1.97(h), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined by 37 C.F.R. §1.56(a) exists.

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Respectfully submitted,

  
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Abby Boone

# INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY DOCKET NO.

1693-90485

SERIAL NO.

10/649-209

Freeman et al.

FILING

08/27/2003

GROUP

## U.S. PATENT DOCUMENTS

| *EXAMINER<br>INITIAL | DOCUMENT NUMBER | DATE      | NAME              | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|----------------------|-----------------|-----------|-------------------|-------|----------|-------------------------------|
|                      | 3,946,320       | 03/23/76  | Overbury          |       |          |                               |
|                      | 4,772,871       | 08/20/88  | Suzuki et al.     |       |          |                               |
|                      | 5,030,954       | 07/09/91  | Ribner            |       |          |                               |
|                      | 5,144,308       | 09/01/92  | Norsworthy        |       |          |                               |
|                      | 5,203,335       | 04/20/93  | Noujaim et al.    |       |          |                               |
|                      | 5,241,310       | 08/31/93  | Tiemann           |       |          |                               |
|                      | 5,446,917       | 08/29/95  | Krisciunas et al. |       |          |                               |
|                      | 5,461,389       | 10/24/95  | Dean              |       |          |                               |
|                      | 5,477,859       | 152/26/95 | Engeter           |       |          |                               |
|                      | 5,521,499       | 05/28/96  | Goldenberg        |       |          |                               |
|                      | 5,668,777       | 09/16/97  | Schneider         |       |          |                               |

## FOREIGN PATENT DOCUMENTS

|  | DOCUMENT NUMBER | DATE     | COUNTRY | CLASS | SUBCLASS | TRANSLATION |    |
|--|-----------------|----------|---------|-------|----------|-------------|----|
|  |                 |          |         |       |          | YES         | NO |
|  | 62-224345       | 10/02/87 | Japan   |       |          |             |    |
|  |                 |          |         |       |          |             |    |
|  |                 |          |         |       |          |             |    |
|  |                 |          |         |       |          |             |    |
|  |                 |          |         |       |          |             |    |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

|  |  |
|--|--|
|  | Norman, O., A Band-Pass Delta-Sigma Modulator for Ultrasound Imaging at 160 MHz Clock Rate, 31 (12) IEEE Journal of Solid-State Circuits 2036-41 (December 1996)                 |
|  | Baseri, R., et al., Testing Adaptive Jamming Cancellation Algorithms using a Digital Beamforming Array, Proceedings to the 1996 IEEE National Radar Conference (May 13-15, 1997) |

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.